

Benzene Sampling Training

ABC Coke By-Products Plant

This information is to be used to train ABC Coke and contractor personnel tasked with collecting benzene samples from ABC Coke By-Products Plant. Annual refresher training will be conducted and the names and dates of participants kept on file in the ABC Lab and Environmental Department.

Sampling Instructions

Sample Locations: Ammonia Still Effluent and 002 Discharge (see map).

PPE Requirements: Hardhat, safety glasses, steel-toed shoes, work gloves and fire-resistant outer wear

Materials Needed: Sample containers (two 40 ml vials per sample), nitrile gloves, long-handled tongs (to collect hot effluent samples), and Benzene Sampling Logbook.

1. Sample containers are pre-labeled, 40 ml volatile organic analyte (VOA) vials pre-preserved by the supplier with a hydrochloric acid solution.
2. During the sampling process, the VOA vials are to be filled with no air bubbles (zero headspace) per EPA Method 5021A.
3. Print the sample ID, sample collection date and time on the sample labels in indelible ink (Sharpie) and record in the Benzene Sampling Logbook.
4. Rubber band VOA vials together and carry samples directly to ABC Coke's laboratory.
5. Complete the chain of custody, verify that the date and times are correct and the information on the chain of custody and labels match.
6. The **Project ID** is the sample location ("Ammonia Still" or "002") and the **Sample ID** is "Ammonia Still Effluent" or "002 Discharge".
7. Place samples in the lab fridge to keep sample temperature below 4°C and put chain of custody in clipboard for outside pickup by LRS.

The trainee below has shown proficiency in the following areas:

- ☐ Sampling Materials/Proper PPE
- ☐ Sample Locations
- ☐ Sample Collection
- ☐ Chain-of-custody, sample labels, record-keeping

Trainee (Print Name & Affiliation)

Signature

Date: _____

Caleb Bush, ABC Coke WWTP Manager

Trainer

Signature

Date: _____